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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. | |
|-----------------|---|----------------------|---------------------|------------------|--|
| 10/684,179 | 10/10/2003 | Thorsten Kiehne | 02/059 MFE | 02/059 MFE 2584 | |
| 38263 | 7590 10/04/2005 | | EXAMINER | | |
| PROPAT, L.L.C. | | | CHEN, VIVIAN | | |
| | 'H SHARON AMITY ROA E, NC 28211-2841 | ΔD | ART UNIT | PAPER NUMBER | |
| | | | 1773 | 1773 | |
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DATE MAILED: 10/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | Applicati | on No. | Applicant(s) | | | | |
|---|---|--|--|--|---------------------|--|--|--|
| | | 10/684,1 | 7 0 | KIEHNE ET AL. | | | | |
| | Office Action Summary | | <u>.</u> | Art Unit | | | | |
| | , | Examine | | | | | | |
| | The MAILING DATE of this commun | Vivian Ch | | 1773 | idross | | | |
| Period for | | ication appears on the | , cover sneet with the c | orrespondence ad | 101 6 33 | | | |
| WHICH - Extension after SD - If NO pe - Failure to Any repl | RTENED STATUTORY PERIOD F EVER IS LONGER, FROM THE M ons of time may be available under the provisions ((6) MONTHS from the mailing date of this communication of the provision of the maximum state of reply within the set or extended period for reply by received by the Office later than three months a content term adjustment. See 37 CFR 1.704(b). | AILING DATE OF TH of 37 CFR 1.136(a). In no ev nunication. atutory period will apply and w will, by statute, cause the app | HIS COMMUNICATION ent, however, may a reply be timil expire SIX (6) MONTHS from discation to become ABANDONE | N. nely filed the mailing date of this c D (35 U.S.C. § 133). | | | | |
| Status | | | | | | | | |
| 1)☑ ₽ | esponsive to communication(s) file | ed on 18 July 2005 | | | | | | |
| ·=- | This action is FINAL . 2b)⊠ This action is non-final. | | | | | | | |
| ′= | ince this application is in condition | , _ | | secution as to the | e merits is | | | |
| | • • | • | er <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. | | | | | |
| Disposition | ı of Claims | | | | | | | |
| 4)⊠ C | 4)⊠ Claim(s) <u>1-7,9-15 and 17-21</u> is/are pending in the application. | | | | | | | |
| | 4a) Of the above claim(s) is/are withdrawn from consideration. | | | | | | | |
| | ☐ Claim(s) is/are allowed. ☐ Claim(s) 1-7,9-15 and 17-21 is/are rejected. ☐ Claim(s) is/are objected to. | | | | | | | |
| 6)⊠ C | | | | | | | | |
| 7)□ C | | | | | | | | |
| 8)□ C | laim(s) are subject to restric | ction and/or election r | equirement. | | | | | |
| Application | n Papers | | | | | | | |
| 9)∐ Tł | ne specification is objected to by th | e Examiner. | | | | | | |
| 10)□ TI | 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner. | | | | | | | |
| Α | Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). | | | | | | | |
| R | Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). | | | | | | | |
| 11) 🗌 Th | ne oath or declaration is objected to | by the Examiner. N | ote the attached Office | Action or form P | ГО-152. | | | |
| Priority un | der 35 U.S.C. § 119 | • | | | | | | |
| <u>-</u> | cknowledgment is made of a claim | for foreign priority un | der 35 U.S.C. § 119(a) |)-(d) or (f). | | | | |
| 1. | 1.⊠ Certified copies of the priority documents have been received. | | | | | | | |
| 2 | 2. Certified copies of the priority documents have been received in Application No | | | | | | | |
| 3. | □ Copies of the certified copies | of the priority docum | ents have been receive | ed in this National | Stage | | | |
| | application from the Internation | nal Bureau (PCT Ru | le 17.2(a)). | | | | | |
| * Se | e the attached detailed Office action | n for a list of the cert | ified copies not receive | ed. | | | | |
| | | | | | | | | |
| Attachment(s | | | _ | | | | | |
| | of References Cited (PTO-892) of Draftsperson's Patent Drawing Review (F | OTO 048) | 4) Interview Summary Paper No(s)/Mail Da | | | | | |
| | or Draitsperson's Patent Drawing Review (F tion Disclosure Statement(s) (PTO-1449 or | | 5) Notice of Informal P | | O-152) | | | |
| | lo(s)/Mail Date | • | 6) Other: | | | | | |

DETAILED ACTION

1. Claims 8, 16 have been cancelled by Applicant.

Continued Examination Under 37 CFR 1.114

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 7/18/2005 has been entered.

Claim Rejections - 35 USC § 103

3. Claims 1-7, 9-15, 17-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over EUROPEAN PATENT APPLICATION 1 176 004 (hereinafter EP '004),

in view of HEBERGER (US 4,214,035) or HEBERGER (US 4,302,505) or HEBERGER (US 4,302,506); and

in view of ENCYCLOPEDIA OF POLYMER SCIENCE (hereinafter POLYMER SCIENCE).

EP '004 discloses a single-layer or multilayer film having the recited R-value, emax ratio, polyester compositions, symmetrical structures, fillers and/or white pigments such as titanium dioxide, thickness, method of making, and uses of said film. (see entire document, particularly

Application/Control Number: 10/684,179

Art Unit: 1773

paragraphs 0017-0021, claims) However, the reference does not explicitly disclose the recited acrylic coatings.

POLYMER SCIENCE discloses that it is well known in the art to apply functional coatings to polyester films in order to improve slip properties (page 201).

The HEBERGER references disclose that it is well known in the art to apply crosslinkable aqueous acrylic coating to one or more surfaces of polyester films to control slip properties wherein the acrylic coating contains a crosslinkable methylmethacrylate-ethylacrylate-methacrylamide terpolymer, wherein the coated film has a typical kinetic coefficient of friction of 0.40 or less and typically applied by in-line coating between orientation steps (HEBEGER '035; line 17-30, 51-68, col. 4; line 19-32, col. 6; Tables II-III) (see corresponding portions of HEBEGER '505 and '506)

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to apply known acrylic-based slip coatings as disclosed in the HEBERGER references to the polyester films of EP '004 in order to improve film-handling properties. One of ordinary skill in the art would have used conventional protective and/or coloration-modifying additives (e.g., UV absorbers, stabilizers, pigments, dyes, bluing agents, brighteners, etc.) to reduce undesirable yellowing (claim 14). It is well known in the art to incorporate surfactants (claim 20) in aqueous coating compositions to improve dispersibility and coating performance. One of ordinary skill in the art would have utilized known, commercially available terpolymer fomulations (claim 21) depending on the specific coating properties, hardness, and other properties desired for specific applications.

Art Unit: 1773

4. Claims 1-7, 9-15, 17-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over HEBERGER (US 4,214,035) or HEBERGER (US 4,302,505) or HEBERGER (US 4,302,506); in view of EUROPEAN PATENT APPLICATION 1 176 004 (hereinafter EP '004).

The HEBERGER references disclose polyester films coated on at least one surface with an crosslinkable aqueous acrylic coating to control slip properties wherein the acrylic coating contains a crosslinkable methylmethacrylate-ethylacrylate-methacrylamide terpolymer, wherein the coated film has a typical kinetic coefficient of friction of 0.40 or less and typically applied by in-line coating between orientation steps (HEBEGER '035; line 17-30, 51-68, col. 4; line 19-32, col. 6; Tables II-III) (see corresponding portions of HEBEGER '505 and '506) However, the reference does not explicitly disclose the recited polyester base films.

EP '004 discloses that it is well known in the art to produce a single-layer or multilayer film having the recited R-value, emax ratio, polyester compositions, symmetrical structures, fillers and/or white pigments such as titanium dioxide, thickness, method of making, wherein the film is suitable as a support for various functional coatings. (see entire document, particularly paragraphs 0017-0021, claims).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to use the polyester films of EP '004 as the substrate for the acrylic-based slip coatings disclosed in the HEBERGER references in order to produce useful film produces with desirable mechanical and physical properties. One of ordinary skill in the art would have used conventional protective and/or coloration-modifying additives (e.g., UV absorbers, stabilizers, pigments, dyes, bluing agents, brighteners, etc.) to reduce undesirable yellowing (claim 14). It is well known in the art to incorporate surfactants (claim 20) in aqueous coating

Application/Control Number: 10/684,179 Page 5

Art Unit: 1773

compositions to improve dispersibility and coating performance. One of ordinary skill in the art would have utilized known, commercially available terpolymer fomulations (claim 21) depending on the specific coating properties, hardness, and other properties desired for specific applications.

Response to Arguments

5. Applicant's arguments filed 7/18/2004 have been considered but are moot in view of the new ground(s) of rejection.

Art Unit: 1773

Conclusion

Page 6

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vivian Chen whose telephone number is (571) 272-1506. The examiner can normally be reached on Monday through Thursday from 8:30 AM to 6 PM. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carol Chaney, can be reached on (571) 272-1284. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

The General Information telephone number for Technology Center 1700 is (571) 272-1700.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

September 29, 2005

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Vivian Chen Primary Examiner Art Unit 1773

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